IMEC278.001AUS PATENT

## Abstract of the Disclosure

## METHOD OF FORMING QUANTUM-MECHANICAL MEMORY AND COMPUTATIONAL DEVICES AND DEVICES OBTAINED THEREOF

The present invention discloses a quantum system comprising computational elements, consisting of an insulated ring of superconductive material, and semi-closed rings, which are used as an interface or input/output facility between the quantum bit and the external world. Faraday induction is used to provide electromagnetic coupling between adjacent computational elements and between the computational elements with interface elements of the quantum system. Therefore the corresponding magnetic flux acts as an information carrier. Ferromagnetic cores are used to improve the magnetic coupling between adjacent elements of the quantum system.

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